WHY

MODERN CREMATION

SHOULD REPLACE

EARTH-BURIAL.

AN EXPOSÉ OF THE DANGERS CAUSED BY INHUMATION

AND

AN EXPLANATION OF THE SUPERIOR MERITS OF INCINERATION UPON NEW AND SCIENTIFIC PRINCIPLES.

Contributed and Compiled by MAX LEVY, ESQ., Secretary of the San Francisco Cremation Company, under the supervision of the Board of Directors.

SAN FRANCISCO:
BACON & COMPANY, BOOK AND JOB PRINTERS,
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San Francisco Cremation Company.

INCORPORATED SEPTEMBER 5, 1885.

Capital Stock $25,000, divided into 500 shares of $50 each.

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CREMATION AS A SANITARY MEASURE.

Like all great and important reforms which aim at the abolishment of a custom as old and revered as the custom is of burying the dead, Cremation, as a substitute for Inhumation, until a comparatively recent date, did not find many adherents, beyond a small circle of scientists. But these, encouraged by their own conviction of the superior merit of the cause, carefully nursed and fostered the idea, and now have the satisfaction to witness its adoption by almost all the nationalities of Europe. It is rapidly gaining favor in the United States, thanks to an enlightened press, which gave and still gives encouragement and support to the advocates of Cremation.

The idea is not exactly a new one—only resuscitated—brought to life again by a better general comprehension of the laws of nature, after it had been abandoned by the Romans and Greeks, two thousand years ago. Since its resurrection, scarce a dozen years have elapsed, but we have reason to look upon the results obtained, so far, with the greatest satisfaction. The reason why Cremation has not been universally adopted yet, notwithstanding its youth, is easily explained.

While science is permitted to progress with giant strides upon ground that shows the glittering gold in its path, it is retarded when the result of its researches is bearing upon petrified superstition. Centuries passed ere the man who insisted that the sun "do move," was looked upon with ridicule or pity. But, thanks to the higher standard of education of the people of the present age, centuries cannot now pass ere another great and important truth shall be comprehended.

It is no astronomical revelation this time. It refers to the bowels of the earth rather, wherein lie deposited the dead of the human race, assigned to them for lasting rest. "For lasting rest." Alas! Some light has been thrown upon that sentiment,

sufficient for any one to see the folly of such presumption, except those who *prefer* to carry the veil of superstition, and such who find it in their interest to keep that veil in its place. But light shall and must prevail. The dead do *not* rest in their graves. It is no profanity, but the bare truth if we assert that they are running a disease factory, and mighty busy they keep at it. And when the material gives out, which might be in fifty, or might be in an hundred years, the spade again penetrates the soil and makes an end of that "everlasting rest."

It is merely a question of time, but certain it is, that our bones will be brought to the surface again. In old graveyards it occurs almost every day, that in digging new graves old ones are invaded, and the bones found there are carefully taken up, not from a feeling of reverence, though, but to be sold as a commercial article. In Egypt, it has become a regular industry to exhume the mummies and grind them to powder, in which condition they are shipped to England to be used as a fertilizer. There is no telling what a speculative people might do, after once that period has passed during which our remains are considered to be entitled to respect. And yet, in treating our subject, this is merely of secondary importance.

Sir Henry Thompson, England's celebrated scientist, asserts most emphatically, that "No dead body is ever placed in the soil without polluting the earth, the air, and the water above and about it."

If he stood alone in his opinion, we might have reason to entertain some doubt, in spite of his superior scientific attainments; but we find it confirmed by eminent physicians and men of science of nearly every part of the world. We quote the following from Dr. Wheelhouse, of Leeds, England: "We shun, and that most wisely, the presence of those afflicted with infectious diseases, so long as they remain amongst us; and yet, no sooner are they removed by death, than we are content, with tender sympathy, indeed, and most loving care, it is true (but with how much wisdom?) to lay them in the ground, that they may slowly dissipate their terribly infectious gases through the soil, and saturating that, may thereby recharge the rains of heaven as they filter through it with all their virulence and terrible power of reproduction in the system of the living. I am not the thorough and entire believer in the disinfecting and depurating power of the soil that I once

was, for terrible examples of its failure have come under my notice. Sir Henry Thompson has sounded a note of alarm on this subject; and though, for the present, it may fall upon ears unheeding or unsympathetic, I yet venture to say that, in time to come, his warning will be enforced by stern necessity, and that some better method of disposing of our dead will take the place of burial."

Every grave and every tomb—and it matters not how air-tight the corpse may have been encased—in course of time exhales poisonous gases.

Hannibal died, with a vast number of his army, of a pestilence caused by the destruction of tombs. The death of the vandals who violated the coffin of Francis I., in the French revolution, is a similar case. The London cholera, of 1854, is believed to have had its origin in the upturning of the earth where victims of the disease in 1665 were buried; and the London Board of Health, in 1849, said cholera was specially prevalent in the vicinity of graveyards.

Dr. Marble, of Cincinnati, who resided near a cemetery, says he is convinced, in the light of modern discoveries, that certain diseases in his own family had their cause in the cemetery.

Dr. Curtis, of Chicago, says: "That the dead do kill the living is only too true."

We quote from "Social Notes" of Mr. W. Cave Thomas: "Cremation insures the purity of the atmosphere and of the springs, both of which are contaminated to a frightful and incalculable extent by the present system in interment, as we shall immediately show. Data shall be given which will put the state of things resulting from this system in its most appalling light. The registered deaths in the United Kingdom for 1874 were 699,747. Taking this as an approximate annual death registry for Great Britain, and allowing ten years for the complete resolution of the body under the present mode of interment a period, it is believed, considerably below the mark—we have in the Kingdon nearly seven millions of dead bodies lying in various stages of decomposition, and giving off noxious exhalations by means of percolation to the atmosphere, and by sending down contaminating matter to the subterranean reservoirs. Calculating for London alone, there were, in 1872, 76,634 deaths; there are, therefore, at a rough estimate, nearly a million of human bodies festering in its immediate neighborhood. Fortunately for the springs, some of the cemeteries are on clayey soils, and bodies interred

in them are, to a certain extent, locked up in their clay vaults only to be a source of mischief when they are opened. Some of these graves have been described, by one who is bound to know, as 'very cesspools of human remains,' which give forth their noxious gases whenever broken into for the purpose of some fresh interment, as many a mourner has experienced to his cost. Bodies, on the other hand, which have been buried in sandy soils, are more quickly resolved, say in some six or seven years. Interments in sandy soils, however, are more likely to endanger the health of the living, for by percolation the fluids contaminate the springs, and the foul gases are exhaled into the atmosphere. * * * It would be a good bargain if we could obtain the adoption of cremation at a price of double fees."

We quote the following from the *North American Review:* "On investigating the condition of graveyards, all sentiment clustering around the tomb is quickly dispelled, and a state of things horrible in its nature and dangerous in its effects arrests our attention. These form the strongest arguments in favor of incineration, and by their force seem to indicate that those who believe in the practice of earth-burial must be ignorant of the result of the custom they advocate. * * * As high scientific authority is seldom called on to discover the origin of local diseases, unless it assumes a malignant or epidemic type, it is safe to believe that thousands of cases of illness and death are occasioned by the disinterment of human remains, without the true cause of the malady being suspected. When graveyards are dug up, who is there to look into the distant past and say: 'This man died of small-pox, pass him by; and that one of the cholera, disturb him not'? Remembering that, a few years since, the yellow fever for two successive summers ravaged the South, how strong is the presumption that the second epidemic was largely occasioned by the burial of the victims of the first. During the reign of terror that existed, men dropped like leaves, and, insecurely coffined, were hurried to shallow graves; sometimes, in the country districts, they were buried almost where they fell. And judging the future by what has been demonstrated in the past, it seems inevitable that visitations of this frightful malady will yet sweep sections of the country, caused from the disturbance of infected burial-spots, by coming generations ignorant of their contents."

The Congress of Hygiene, which met at Brussels about ten years ago, adopted a resolution which recommends an intervening

space of from four hundred to five hundred yards between a cemetery and any habitation.

When, furthermore, the facts are considered, that the International Congress, which convened in Florence in 1869, passed a resolution strongly recommending the substitution of cremation for interment, and the Royal Institute of License and Letters of Lombardy petitioned the Italian Parliament for the same purpose; when men of recognized authority, like Pettenkofer, Professor of Chemistry at the University of Munich, Professor Reinhart, of Dresden, Professor Selmi, of Mantua, Dr. Coletti, Rector of the University at Padua, Professor Brunetti, of the same University, Wegman, Ercolani, Sir Henry Thompson, Dr. Playfair, in addition to which, "The London Lancet" (Jan. 11, '79), "Contemporary Review" (Jan., '74), "The North American Review" (Sept., '82), and, with but few exceptions, the press of the United States in general, we say: If these are advocating the adoption of cremation, even if for no other than hygienic advantages, does it not behoove government and people to open their eyes?

The precaution recommended by the Congress of Hygiene, as stated, is utterly disregarded in this city. The immediate surroundings of the graveyards are occupied by dwellings supplied with water from wells which drain the soil polluted by decaying matter. Every medical man will confirm, that the status of health in the neighborhood of graveyards is considerably below the average of that of districts further off. Statistics in relation thereto might possibly be collected by the exercise of such perseverance and diplomacy found only in the reporter of some enterprising newspaper. He might begin with investigating the sanitary status of the children who visit the public school located on the Point Lobos Road, about one hundred yards from the Odd Fellows' cemetery, and similar investigations in schools of different districts, for comparison. There is no doubt about that, if the real facts could be ascertained, some astonishing revelations would come to light.

It is evident that Cremation is, first, above all, a *sanitary measure.*

We most sincerely desire that this claim may be fully understood, and therefore offer an additional substantiation in the following excellent and exhaustive paper, kindly contributed and expressly written for the San Francisco Cremation Company by an able, practical physician and eminent sanitarian of this city.

EARTH BURIAL AND CREMATION,

Considered from a Sanitary Standpoint.

By Dr. Alfred E. Regensburger.

Decaying animal matter is one of the most fertile and prolific causes of sickness and death. This may be enunciated as a sanitary maxim, and alone is a valid, good, and sufficient reason for discontinuing earth-burial, and substituting incineration for it. "Decomposing human remains," truly said Sir T. Spencer Wells, when speaking before the British Medical Association, in 1880, "so pollute air, earth, and water as to diminish the general health and the average duration of life." Cause and effect are well shown in Cairo, Egypt. A canal which is dry during a part of the year, runs through the city, into which the inhabitants throw carrion and offal of all kinds. This gives rise annually to the plague and the disease only stops when, by the overflow of the Nile, the canal is flushed and this matter carried away. Ethiopia furnishes another example. This unfortunate country sometimes suffers from an invasion of swarms of locusts, who devour everything growing in the fields, and subsequently cause the plague from the putrefaction of their dead bodies. That the dangers arising from such a cause are not exaggerated, is full well attested by the prevalence of this affection, described as the Black Death or the Great Mortality, in the fourteenth century, when it raged in Asia, Africa and Europe, costing the latter country, alone, a loss of 25,000,000 lives. The last visitation of this disease in London, in 1665, carried off 68,596 of its inhabitants—one-third of the whole number living there at that time. Applying that calculation to this city, with an estimated population of 234,520, according to the last census, would make over 78,000.

Corpses produce during the process of decomposition a great amount of carbonic acid gas. Dr. Parkes has proven that the quantity of this gas present in the air of graveyards is doubled. Physiology teaches us, that atmospheric air is composed of 21 per cent. by volume of oxygen, and of 79 per cent. by volume of nitrogen, with 1-20 per cent. of carbonic acid, and traces of ammonia, with a varying quantity of aqueous vapor, dependent upon the

temperature. When it contains 20 per cent. of carbonic acid gas, it can no longer sustain life. The deadly character of the gas is known to almost every one. Men, when cleaning a well, or before descending into any badly ventilated space, make sure that this gas is not present in too great a quantity, lest they, without taking this precaution, should lose their lives in the attempt. An increased amount of this gas in the atmosphere gives the lungs more work to perform, and after a time paralyzes, so to speak, the functions of these organs to a greater or less extent, that they are no longer able to throw off enough of it, compatible with a state of health. The result is, that the blood becomes overcharged with it, loses its normal character, and leads to impairment of nutrition, disease, and finally death. To more thoroughly illustrate, let me portray to the mind's eye of the reader the historical, and to all medical men, well-known picture of the Black Hole of Calcutta. On June 21st, 1756, at 8 o'clock in the evening, 146 persons were incarcerated in a dungeon 14 by 16 feet, having hardly any ventilation, excepting such as two very small, closely barred windows afforded. Before nine o'clock the victims were suffering from severe thirst, and a difficulty of respiration. By 11 o'clock one-third were dead. Half an hour later, one-half of the living were delirious; 6 o'clock of the next morning found only 23 alive, and of these many died afterwards of fever there contracted.

Dr. Parkes has also shown that each body decomposing in a grave gives off 50 cubic feet of this gas per year. In addition to this gas, cemeteries contain immense quantities of ill-smelling gases, carburetted and sulphuretted hydrogen, ammonia, nitrogen, and volatile organic matters diffused in their atmosphere. What a quantity of these injurious-to-health and death dealing elements of decomposition must hundreds of decaying human remains, situated in a soil which is so permeated and poisoned with them that it absorbs no more, and allows all to pass through the ground into the air above, produce, and what a percentage of the death rate must they answer for!

Affections of the digestive organs and intestinal fluxes are often tracable to the inhalation of such matters.

Certain it is, that those who live near these pestiferous places, or whose occupations call them there, are not long-lived. Grave diggers' lives are undoubtedly shortened by their calling. The

same may be said of church sextons, who are also very liable to malignant fevers from shaking the floor coverings and cleaning the floors of churches underneath which burial vaults are located. The health statistics of all large cities prove that where burial grounds are situated in the vicinity of populous neighborhods, the residents are sickly. Buck's Hygiene, p. 539, vol. 1, may be quoted to this effect: "Before interments in grounds within the city," meaning London, "were forbidden, numerous instances occurred where the public health was affected by these pestiferous spots." From the archives of the French Academy of Medicine, we learn that in the districts near Mont Parnasse, Père-la-chaise, and other cemeteries, diseases of the throat and lungs are very often met with, and are dependent upon the proximity of these places to the abodes of the living.

The specific poison of every contagious or communicable disease may originate and lurk in graveyards. Lurk—yes, lurk—for it takes a long time for the vitality of the germs of disease to be destroyed. As an instance of their longevity, Prof. Alonzo Clark, of New York, used to relate every winter to his class, how yellow fever originated in a Southern community by the opening of bureau drawers wherein the germ-laden air had been confined for over a year since the disappearance of the former epidemic which had visited that place. In 1853, an epidemic of yellow fever, then raging in New Orleans, was aggravated by opening the graves of those who had died of that affection. The opening of graves in yellow fever countries has often called forth an epidemic of this trouble.

Prof. Bianchi ascribes the reappearance of the plague in Modena, in 1828, to excavations made in the ground where many of the victims of that disease had been buried over three hundred years. In 1843, when the parish church at Winchinhampton was rebuilt, some of the superfluous soil from the cemetery was sold, and used for manure in gardens, with the result of decimating the population. The malignancy of the cholera which prevailed in London in 1854, was increased by digging sewers in the ground which had served as a burial site for those who had died of the plague which prevailed there in 1665.

Rauch, in his monograph on "Intra-mural Interments in Populous Cities," (1866), demonstrates indubitably the spread of cholera to have been due to the effluvia generated by decom-

posing bodies. In Burlington, Iowa, in 1850, no case occurred until twenty bodies had been buried, and then those who became afflicted lived in the *direction of the wind* from the cemetery.

This affection, as well as typhoid fever, and numerous other diseases, have likewise been caused by the drinking of water obtained from wells and pumps situated near cemeteries, which, upon cursory examination, had all the appearances of being good and potable, bearing out the asseveration of Sir T. Spencer Wells, that, "Water neither cloudy nor stinking, but rather inviting and popular—like the water of the Broad Street Pump in 1874—has carried cholera to those who drank it. How often typhoid fever has been caused in this way, who can tell?" Dr. Parkes, the eminent authority on public hygiene, to whom reference has already been made, found water obtained from such localities to be charged with ammonium and calcium nitrates, fatty acids, and much organic matter. Brande, and every one else whose opinion is of any value in this matter, are agreed upon the deleterious and dangerous character of such water. Whole communities may be rendered sickly by this means, as the two Italian villages of Rolondella and Bollita prove, where the inhabitants obtained their water supply from sources so contaminated. Eassie, in his excellent monongram on Cremation (p. 66)—which I recommend to the perusal of all those interested in the subject—refers to the fevers and dysentery contracted by the English soldiers in the Crimea from drinking water which was obtained from wells located in close proximity to where a number of their dead comrades had been buried.

Without going any further, the whole matter may be recapitulated in this one sentence, taken from Dr. W. H. Ford's (President of the Philadelphia Board of Health) article on soil and water, in Buck's Hygiene, viz: "The water of wells located in graveyards, or in close proximity of graveyards, should always be looked upon with suspicion, and its use prohibited."

With these facts, thus stated by the highest and best authorities upon this subject, can any one doubt the danger to the public health from this source; and can any thinking person, knowing that people do and will live near cemeteries, and have wells there, and drink the water there obtained, totally ignoring the fearful results, be unmindful of it?

Let us retrace our steps, and give a moment's attention to

cholera in this connection, as it interests us especially at this time. Whether water, earth, or air be the factor in its production, is immaterial. This city being the distributing point for merchandise and the port of entry for all persons coming from trans-Pacific countries, and in a great measure from the Atlantic coast, and being also in the direct line of travel from countries where this scourge is raging, is necessarily exposed to the same dangers that other places, similarly located, would be. Besides that, we are so situated that we are in the direction of the wind of some of our most popular cemeteries—which, in this case, is more of an element of danger than in many other places, as almost all the year long there is, on an average, more wind and more steady blowing from one direction (from the cemeteries in this instance), than in most other large cities.

Finally, our city contains a large Chinese population, estimated at 22,000 (probably more), in whose midst cholera may occur without the authorities, or these people themselves, being cognizant of the cause of death, as this community employ physicians (?) of their own nationality, persons entirely ignorant of the veriest rudiments of medical science. Not until the mischief wrought by the burial of such a body in our midst, or until, according to the prevailing Chinese custom, it is exhumed for shipment to the celestial (?) kingdom, will we become cognizant of it. This affection has, of late, been reaping its harvest in France, Italy, and Spain. In the latter country it broke out first in Granada, after the earthquakes in that city. It was clearly proven to have originated from the emanations given off from the bodies of those killed in the shocks, and buried within the city limits. From Nagasaki, Japan, news is brought of its appearance. Probably, we shall soon hear of its extension into China. No one can tell where next it will make its appearance. What guaranty have we that it will not come to San Francisco? We have had it here once already. In 1850, it was brought to this city by a vessel from Panama. The disease broke out on the 1st of October, and stopped by Christmas of the same year, after having cost the city 250 lives. It spread to Sacramento—then a city of 8,000 inhabitants—and carried off by December 1,000 of its denizens, causing a larger proportion of deaths than appears at first sight. Half of the population had fled at the approach of the scourge, leaving only 4,000 souls for it to feed upon. So the disease really killed

twenty-five per cent., or one-fourth, of the actual number of people who lived there.

Our competent and skilled health officer, Dr. Meares, significantly touches upon the subject in his last annual (1885) report. Says Dr. Meares: "It is highly probable that it" (the cholera) "will extend to other countries in Europe, and may, at any time, make its appearance in our eastern cities. If so, in spite of the most rigid quarantine regulations, it will probably visit the Pacific Coast."

On the river Ganges, in India, it is always present, whence it is often spread all over the world by travelers from that region. While it is true that the great number of Mohammedan pilgrims, who yearly, in fulfilling their religious duties, congregate there, may, by their excesses, filth and malhygienic influences, with which they are surrounded, propagate the disease, yet I venture nothing when I say that the real cause of its being endemic there is the using of that country as a burial place. Substitute incineration for it, and the disease will cease to be endemic, and be stamped out. What holds good in India, may some day do to a less extent here.

There is another danger: the bodies of persons having died of cholera asiatica, in the belief that it was cholera nostras, may be buried without extra precautions having been taken to prevent its spread, and thus be the *fons et origo* of an epidemic. It is not always possible to differentiate these two diseases from each other. Sir Guyer Hunter, at a meeting of the Medical and Surgical Society of London, held March 31st, 1885, voiced the opinion of every well-informed physician, when he remarked that there were cases wherein it is impossible to find a difference between these two affections. When Koch first announced to the medical world the discovery of his comma bacillus—said to be only present in and causing cholera asiatica—it was thought that a means of differentiation had been found, which would be infallible. This expectation was short-lived. Drs. Prior, Finkler, and others demonstrated its presence in cholera nostras. Others also found it in old cheese, sputa, etc. Mons. Ferran's inoculations in Spain with the comma bacillus miscarried; and to cap the climax, several French physicians swallowed a number of these bodies without any ill effects. Several of the European governments, recognizing the spread of cholera to have emanated from the remains of those who had succumbed to

it, have had furnaces built for the cremation of those who died of this disease. Even then—until cremation is universal—will cases of cholera asiatica, not submitted to incineration, give rise to an outbreak of this trouble.

We have seen what some of the evils of burials are; another one yet remains to be noticed. Sooner or later, in all cities, cemeteries encroach upon their limits, necessitating the removal of the buried bodies, in all stages of decomposition, in order to enable streets to be cut through, and to be used for building lots, and put to use for the living. After what has already been said, it is not necessary to dilate upon the dangers to the public health from such a procedure. It has been held that this objection to cemeteries does not apply to new countries like ours. That such is not the case, every one who lives, or has lived, in this country, knows. Already, in this city, are some of them, near, only too near to the residences of our citizens; and it will not be many years more before they will have to be removed from their present sites. History repeats itself, and will do so in this instance.

To sum up: Air, earth and water are so poisoned by the products of decomposition, emanating from buried remains of persons, many of whom labored under all forms of ills, that they are capable of harboring, generating and originating every form of disease; and, secondarily, may be the occult means of so undermining the hygienic condition of whole communities, that earth-burial should be discountenanced and forbidden by law, as being prejudicial and detrimental to the public health. The entire medical literature and the observation and experience of every physician prove such to be the case, with as great a certitude as can be attained in anything. Preventive medicine forms a Gibraltar-like, impregnable, and unconquerable bulwark of facts, militating against the continuance of this practice. With all these points scored in favor of cremation, it has no corresponding disadvantages, sanitarily, and with modern appliances, the process can be carried out so perfectly that no odors are perceptible, as the furnaces are self-condensers of evaporable matters, and nothing is noticeable which can, in the slightest degree, be offensive to the most fastidious. It is a simple, clearly sanitary mode for the disposal of the dead, completed in an hour or two at most, substituted for an unhealthy and dangerous-to-health one, which takes years for its completion.

Without any effort at elegant diction or polished periods, or any display of rhetorical pyrotechnics, as it is not our intention to appeal to the emotions, we leave the subject to the sober judgment of every fair-minded and thinking person, of whose verdict we have no doubt.

In the language of Cowper:

> "But truths, on which depends our main concern,
> That 't is our shame and misery not to learn,
> Shine by the side of every path we tread,
> With such a luster, he that runs may read."

REFINED SENTIMENT FAVORS CREMATION.

As the question, Earth-burial or Cremation ? presents itself to the view of any intelligent layman who has given the matter that attention which its importance demands, many interesting and telling points might be advanced in favor of cremation, not *one* in favor of earth-burial.

The latter is no more nor less than barbarism. Thoughtless people cannot recognize it as such, for the same reason that cannibals cannot recognize man-eating as equally barbarous, they having been brought up to it from earliest childhood, and their limited intelligence does not urge them on to any deviation. But the civilized descendants of cannibals, like, for instance, the natives of the Hawaiian Islands, look back with horror upon the hideous custom of their forefathers, exactly as coming generations will look upon our present custom of earth-burial.

Often it is remarked the time has not come yet for the introduction of this reform; sentiment, and religious scruples, might prove too powerful opponents. We are, however, in the position to assert: the time is ripe, and the near future will bear us out. To the sentimental, who relishes the idea that his wife and children are to visit his grave and plant flowers upon the same, we say: Beware, lest your selfishness might carry sorrow and death into your family. Your very body sends up the poison. Devotion is an excellent virtue, but do not ask it at such a price. It is possibly to cherish the memory of a loved one who's remains you have subjected to that most loathsome of all conditions: putrefaction in the grave. Would not the same feeling be inspired when the remains are reduced to their purest state, and enclosed in a beautiful urn? You assert, it would destroy all sentiment from which so much consolation is derived,—but your "graveyard-sentiment" is dangerous and false; it springs from lack of information, not to say criminal ignorance. And when false senti-

mentality can be confronted with reality, and a lesson taken therefrom, we shall present the inside of your grave to your view.

"It presents the most terrible spectacle which it is possible to conceive, whether the body within it is that of a famous statesman under a magnificent monument, or that of a pauper in a potter's field. In either case, a most foul and intolerable stench meets the daring investigator who opens the abode of peace. And however great the horror and disgust caused by the sense of smell, the impressions produced by inspection are yet more horrible. The brain, the noblest part of man, which may shortly before have furnished the wisdom that saved an empire—the brain has fallen out of its bony case, a shapeless, unctuous, stinking mass, abhorred even by the worms which so ravenously seize upon the flesh, the heart, the lungs, and especially the intestines. The eyesockets are empty, and every part, except the bones, is rotten, revolting, harrowing to the senses in the highest degree. Why, in the name of a merciful God, should we subject ourselves, and those we love, to so dreadful a condition, while science at once offers us ways and means of avoiding it, by a rapid and complete destruction of the body? Verily, the man of sensibility, animated by pious reverence for the dead, who, laying aside all illusions and self-deception, and aided at once by science and by imagination, looks into the grave, and for a moment watches the process of decay, will never again speak or think of the common mode of sepulture as the mode enjoined by respect, or inspired by affection or by tenderness for the departed."

These are the expressions of a man who occupies a prominent position in the scientific world; a man whose sacrifices for the benefit of mankind have earned for him the most enviable reputation of a philanthropist—Wegmann Ercolani, of Switzerland. Even of our own experience, we may speak of the revolting spectacle of a human body being devoured by worms. These are somewhat resembling rainworms, but of a yellowish white color—a species that sends a shudder through your body at the bare imagination that one of them might creep over your hand. The whole mass is literally surging up and down like the waves of a miniature ocean. There lies a repulsive mass of juice that once constituted the brains—that part of the human body which renders man the image of God—is partly resolving into poisonous gas and partly absorbed by the surroundings, from whence it is,

by the waters of the rain, carried through the soil, on to its mischievous errand. The same process follows with the marrow of the bones, and such other parts of the body as are not devoured by the worms; until finally, after years, there is nothing left but a heap of detached bones. Will they last till resurrection day? Possibly ours will; but the millions who have gone before us—princes and paupers, sinners and saints—their bones have crumbled to ashes by nature's process of burning in the grave, so slow, so repulsive, so devoid of any and all requisites for *creating* that reverential feeling, which has its existence by virtue of inheritance *only*. Otherwise, the custom of burial has no claim on humanity for such consideration.

True and refined sentiment is in favor of cremation. The immortal Goethe thus gives expression to it in "The Natural Daughter."

"O, for the wise customs of the ancients, to dissolve
The perfect, the sublime dignity of human form,
Which nature earnestly and slowly built,
After the spirit, the efficient, has been severed
By the action of purest flame.
And when the blaze ascended heavenward
In thousand tongues, and 'midst fumes and clouds
The eagle's wing is moving on, auguringly,
Then tears were drying up, and the survivors'
Unrestrained glances followed the new god
Into Olymp's celestial space.
O, treasure up in a most precious urn
The dull remains of ashes and of bones,
That these arms, in vain extended,
May hold but something, that unto this heart,
Which anxiously is yearning into empty space,
I still may press what is its melancholy own."

And now, let us examine a most fitting companion to this picture (from the graveyard scene of Shakespeare's "Hamlet"):

HAMLET. Let me see. (Takes the skull.) Alas, poor Yorick! I knew him Horatio: a fellow of infinite jest, of most excellent fancy. He hath borne me on his back a thousand times; and now, how abhorred in my imagination it is! My gorge rises at it. Here hung those lips, that I have kissed I know not how oft. Where be your gibes now? your gambols? your songs? your flashes of merriment, that were wont to set the table on a roar? Not one, now, to mock your own grinning? quite chop-fallen? Now get you to my lady's chamber, and tell her: let her paint an inch thick, to this favor she must come; make her laugh at that. Prythee, Horatio, tell me one thing.

HORATIO. What's that, my lord?
HAMLET. Dost thou think Alexander looked o' this fashion i' the earth?
HORATIO. E'en so.
HAMLET. And smelt so? Pah! (Puts down the skull.)
HORATIO. E'en so, my lord.

RELIGIOUS SCRUPLES.

And now let us examine to what extent religious scruples oppose cremation. We were diligently searching for them, but what presented itself, is, compared to the general favor with which the idea of cremation is received, insignficant.

The following is taken from a letter of one of the most learned ecclesiastics of Italy, a Catholic priest, and professor of theology at the University of Pavia, Dr. A. Buccellatti, addressed to Professor Polli, at Milano:

"You enquire of me in what relation cremation stands to religion. As a reasoning Catholic, free from any prejudice, I do not hesitate for a moment to openly declare that cremation, as you and your colleagues understand it, is not inconsistent with the teachings of religion."

This declaration, coming, as it does, from a recognized authority, will, no doubt, tend to allay certain fears of a few of our Catholic brethren, who do not seem to know that the foundations of their Church reach far deeper than the grave, and her pillars of marble and granite far above the crematorium.

At the Crematorium of Gotha, Germany, a record is kept about the various denominations of those who were cremated there. That record is published in the annual report, for 1884, of the Cremation Society of Berlin, and shows the Catholic religion represented by 11 per cent. Considering that Germany is essentially a Protestant country, this is a pretty fair showing.

The clergy perform the religious rites at the Crematorium. And we trust the souls of the cremated reach the same destination that they would have reached had their bodies been subjected to the rotting process.

On the occasion of the first incineration of a dead body in the Crematorium at Gotha, the Protestant clergy were largely represented. The President of the Society was authorized to state that, by their presence, they desired to demonstrate that the process of incineration is by no means irreligious, and that they are

willing and ready to perform the religious rites at the Crematorium, as well as at the graveyard.

Dr. Wiener, chief rabbi at Oppeln, Germany, renowned for his learning and for his faith, has joined the Cremation Society of Berlin. In his letter applying for membership, he says: "I give cremation most decidedly the preference over burial under ground, and I shall endeavor to promote its adoption to the full extent of my ability."

The following is taken from an article,[1] whose author is the Rev. Dr. Bettelheim, of this city, the same gentleman who gives it as his opinion that, in the sense of the Mosaic law, it matters not how we *die*, but how we *live*.

"We read in most of the pamphlets published by crematory societies, that religious creeds are opposed to it. Probably some 'religions' are; but I can safely say that these aforementioned guides for the Israelites—orthodox or reformed—contain nothing to oppose it, but, on the contrary, point out in an approving manner the usefulness, nay, utility of cremation. The Bible (I. Sam. xxxi. 12, 13; 2 Chron. xvi. 14, xxix. 19; Amos vi, 10; Jer. xxxiv. 5, etc.) speaks clearly of the ceremony of cremation; and the phrase (I. Moses, xviii. 27) "I am but dust and ashes" can have but one meaning—that in biblical times the burning of the body was, if not generally prevalent, at least in usage. In fact, in bible times they had all modes of disposing of the body after death —embalming, and thus preserving the dead, like the Egyptians; drying it upon trees, stakes, or on dry, hot sand—another mode of preservation—like the Indians; interment in the earth, or keeping in sepulchres or caves. The Israelites, coming in contact with so many nations of the globe, adopted the usages of various countries in regard to the disposal of the dead. They could easily conform to the customs of others in this respect, for there is no command, either in the Bible or in the Talmud, as to the mode of disposition of the dead.

"An incident is related in the Talmud, of Sapor, the ruler of Palmyra. He once asked Rabbi Chama, 'In what part of the Bible is burial commanded?' and the learned Rabbi was compelled to acknowledge that there was no law of the kind in existence.

"Whilst Holy Writ expressly says (Deut. xxi. 22) "If a man

[1] Published in the *San Franciscan*, October 3, 1885.

has committed a sin worthy of death, and he be put to death, and thou hang him on a tree, his body shall not remain all night, but thou shalt surely bury him on the same day" (compare Joshua, viii. 9)—a commandment which surely expresses the highest principle of humanity—Holy Writ is nevertheless silent in regard to the dead who have given up their lives through natural causes. We know, only, that Abraham laid the body of his wife, Sarah, in a cave. The body of Jacob was carried from Egypt, and brought in a state of embalmment to the land of Canaan ; and the bones of Joseph were taken along by the Israelites, when they left Egypt on their forty years' journey.

"In biblical times, it is certain that all modes prevailed. In post-biblical time, cremation seems to have been no longer in practice. Tacitus (History, v. 5) says expressly of the Jews: *Corpora condere, quam cremare e more Egyptio*—"They now bury the body, after the manner of the Egyptians, instead of burning it"; and the Talmud, therefore, does not consider the question of cremation. Nevertheless, it is more than once mentioned, and the question as to whether the ashes of the cremated are levitically clean or not, is discussed. In Tract: Niddah, xxvi, Nazir, li, and especially Niddah, xxvii, is said, in the name of Rabbi Itzchak, that "when a corpse is cremated and the frame (skeleton) is preserved—or, rather, not destroyed by the fire—then the corpse is levitically unclean. 'Then the question is propounded, How is it possible that the flesh shall be burned, and not the frame?' The answer is, that probably the corpse was burnt on a catabla—on a marble slab.

"It would be too tiresome for the kind reader to follow me in the labyrinth of the old casuistic controversy. All that I desire to prove is, that even in Talmudical times, and in all likelihood until the fourth century of the present era, cremation still prevailed among the Jews, and therefore was not opposed either by Bible or Talmud.

"Science has shown that burning merely expedites the process of resolving the body into its original elements, speedily achieving what putrefaction accomplishes in a long time. * * *

* If Almighty God chooses to resurrect a body, it can be no more difficult for him to resurrect one which has passed through the process of cremation, than a body which has been putrified in the ground, where, after many years, not the least trace of the

corpse is left, and dust becomes really dust. Dust or ashes would be alike to Him. * * * * No Jewish doctrine, inclusive of the philosophical speculation in regard to resurrection, offers any rational opposition to cremation; and the sooner it is universally adopted, the better it will be for living mankind. Public hygiene demands it; reason and science approve it. * * * * Religion should never be opposed to the welfare and health of the living world. We all claim to be progressive. Let cremation be one of the mile-stones of modern progress—it will break many links from the iron chain of superstition. When fire, and not the worm, shall disband the elements of the body in which the pure spark of God, the soul, once dwelt but no longer reigns, then more honor and respect will be rendered to the physical part of humanity by delivering it to the flames, reducing it to ashes, and preserving it in an urn, than—in the grave."

The Rev. Heber Newton advocates Cremation. He says: "Why should people adhere to interment, a custom unspeakably revolting? The dead are a standing menace. No sanitary science in our homes can save us from perpetual danger, while the homes of the dead violate the laws of nature. From our graves gases are liberated to poison the air, the fountain heads of water are tainted, and the germs of disease are turned up to the surface of the earth with every change made by the cemetery superintendent. I hope to see the introduction of Cremation."

In thus quoting the opinion of representatives of the various religious denominations, it must not be expected that our cause will receive a friendly recognition from *all*. Knowing only too well that, if Moses and Christ would come into this world, and show some of them the errors of their belief, even Moses and Christ would meet opposition fortified with proofs from the Bible and commentators.

THE PRESENT STATE OF THE CREMATION QUESTION IN THE WORLD.

For the purpose of giving the public an opportunity to judge of the progress of incineration and the importance it has assumed, we give the following brief outline of what has been collected from our correspondence and from the printed reports of various Cremation Societies, in particular those of the Cremation Society of England, which appears to be the best informed.

We will begin, however, by showing the present condition of

THE SAN FRANCISCO CREMATION COMPANY.

The movement for introducing Cremation in San Francisco was begun by a small number of our German citizens, in the year 1881. The honor of having given the first impulse thereto, is due to Mr. Frederick Schuenemann–Pott, under whose chairmanship "The First Cremation Society of San Francisco" was incorporated, Feburary 17th, 1882.[1] The German language was adopted for their proceedings and meetings; consequently, other nationalities were reluctant to join. Although the Society recruited itself from the German element only, the membership rose from 54 in 1883 to 114 in 1884, increasing up to the second quarter of 1885 to 154 members. The German language, in an English-speaking country, was justly deemed a hindrance to the progress of the cause, and therefore the English language was adopted.

Independent of the organized Cremation Society, several American gentlemen, having the same objects in view, meanwhile circulated a subscription list, for the purpose of raising the means

[1] Frederick Schuenemann–Pott, Dr. J. Bayer, J. A. Bauer, Fred. Hess, F. Roeding, Gabriel Taussig, Dr. A. Wilhelm, Ed. Wenzel and M. Mendheim constituted the first Board of Directors of "The First Cremation Society of San Francisco."

necessary for the construction of a crematorium. A union was effected, the subscriptions continued, and within a few weeks the amount of $10,000 had been subscribed by members, as well as non-members. The subscribers now constitute the "San Francisco Cremation Company," incorporated Sept. 5, 1885.

To correct a misunderstanding which seems to be general among the public, it may as well be remarked right here, that subscribers to the capital stock *are not obliged* to have their bodies cremated. By signing the subscription list, no other obligations are assumed than those of a shareholder in a stock company. They are no more under obligation to adhere to the principle of Cremation than a non-subscriber.

As it is not deemed prudent to commence operations until a larger proportion of the capital required shall have been subscribed, we appeal to the friends of this movement to consider well, how important it is to prove by *actual demonstration* the merits of the cause we advocate; as truly and beautifully expressed by one of the leading journals of this city :

"No one who has studied the subject will deny that incineration is a more decent way of disposing of the dead than our modern plan of burial. To thrust the corpse of a loved one into a dark, damp hole, in which decay, with all its loathsome accompaniments, will presently play havoc with a face and form that was tenderly cherished, is a revolting idea. Every spadeful of earth that is thrown upon the coffin is a stab in the breasts of those who mourn the deceased. The return from the graveyard without the corpse is so desolate, that it would seem that nothing could be devised to intensify more cruelly the agony of grief than this. Years and years ago intramural interments were forbidden in all European cities, for the reason that pestilences were found to spring from cemeteries surrounded by dwelling-houses. In this country cities have no walls, but the same reason has induced us to establish cemeteries at some distance from residences. But the precaution avails little. Cities grow out towards the cemeteries, and eventually surround them. People go to cemeteries in crowds—to attend funerals, to decorate graves, to pay what is regarded as a decorous token of respect for the dead. They bring away with them the seeds of death. From every plot of earth under which human forms are decaying there exudes an imperceptible malaria, which is more fatal than the night air of the

Pontine marshes or the rice swamps of the South. An irreverent doctor used to say that every funeral insured two more within a brief period.

"Incineration is a strictly scientific process, performed by the aid of an apparatus specially designed for that purpose. The body is decomposed and reduced to ashes in about one hour. It is called burning in the same sense as rotting under the ground might be called burning. It has been described as 'a bath in a rose-tinted atmosphere as fascinating to the eye as it is awe-inspiring.' It is the dream of a poet. It is performed noiselessly and reverentially. The family do not seem to desert their lost one in a damp hole in the earth. They seem to see him fade into eternity under their eyes, with a mellow splendor which robs death of half its horror. Believers have fancied that they could discern the soul winging its flight to the realms of the blessed. Even to the most hardened agnostic, the ceremony is invested with a dignity which silences the scoffer and commands reverent respect."

Even if we succeed in raising the amount of $25,000, the structure to be erected can be of but modest proportions, if it is considered that the purchase price for a suitable building lot, the cost for constructing the apparatus, inevitable expense, and some reserve fund as working capital, will very likely require one-half of it. A committee has been appointed to purchase a suitable building site, and correspondence is being carried on with patentees of the various incinerating systems, with a view of selecting the best.

A chance is therefore open to one of our public spirited citizens with means, by enlarging our limit, to create for himself a monument in the shape of a grand Crematorium, which, even in modest proportions, would be grander and nobler in its purpose than the grandest and costliest graveyard-mausoleum. The Crematorium will survive long after the vault shall have either crumbled to pieces from neglect, or been removed from necessity, or destroyed by vandalism, and will testify to the philanthropy of its founder.

Donation Fund.

Many persons, though not willing to subscribe to the capital stock, are inclined, in order to support the cause, to make a donation, the acceptance of which has heretofore been declined. The

Board of Directors have now concluded to follow the example of the Cremation Societies of England, Berlin, and others, by accepting contributions. The donation-fund will be used mainly for the purpose of enlightening the people at large so that they will understand this question thoroughly in all its bearings. To do this properly and effectually entails expense, which, if defrayed from the capital stock, might seriously diminish the fund for the construction of a Crematorium. And should that fund, either by donations or bequests, at any time assume larger proportions than required for the purpose mentioned, it will be applied to the building fund.

Donations, therefore, will now be thankfully received by the President or Secretary, or by any member of the Board of Directors.

EASTERN STATES.

Several Crematoria are in operation already in this country. In 1876, Dr. Lemoyne carried out the Cremation of Baron de Palm, though in a crudely constructed apparatus, and in 1879 his own remains were cremated in it. It is erected near Washington, Pa., where quite a number of cremations have been made since.

The second Crematorium completed in the United States was that at Lancaster, in the immediate vicinity of Philadelphia. The body of Mrs. Christiana Beseler was the first to be cremated there.

The body of Orson S. Murray was taken there shortly from Cincinnati, by the son and immediate friends of the deceased. A gentleman who was of the party, furnishes the following graphic account:

The Process of Cremation at Lancaster, Pa.

"Mr. Platt, one of the officers of the Lancaster Cremation Society took charge of the body on its arrival. It was immediately conveyed to the Crematorium, where a large number of people of all ages and sexes had congregated to witness the operation. After a short pause and conversation in the reception room, the gentlemen were led into the auditorium, which was filled with visitors from the town. The officers of both societies formed a semicircle in front of the furnace, with the son of the deceased in the center. The view presented was novel and striking. The small building, resembling in many respects a country meeting-house, built of

pressed brick, was too little for the purpose, and the heat from the furnace was intense. In front of the spectators were four doors, opening into the reception, the preparing, and the two retort rooms. Only one retort was in position, however, and the heavy iron door protecting the opening to it was about to be removed. A deathly silence prevailed.

A knock at the preparing room door was the signal to begin. The preparing table moved noiselessly into the auditorium, bearing its sacred burden, covered with a heavy dark cloth, and was wheeled into position in front of the retort. The cloth was removed, and the corpse, enveloped in a large white muslin sheet soaked in alum water, lay there but for a moment. The door of the retort swung open, and the rosy light of 2,200 degrees of heat filled the auditorium. No fire or flame was visible. Simply the incandescent light thrown by the heat from the brick tiling composing the retort was to be seen, and it like unto the picture of the setting sun on a summer evening. The iron cradle upon which lay the body was rolled from the top of the table noiselessly through the mouth of the retort, and it disappeared in the light within. The door swung to and all was over. No noise, no fire, no color, nothing of an unpleasant nature marred the operation. No dull sound of the clod upon the coffin-lid sent a shudder through the nerves of the beholder.

The auditorium was gradually vacated, and no one remained but the son of the deceased, and the officers of the two societies before mentioned. A view of the process going on behind that large iron door was to be taken. A delay of half an hour was necessary before the gases being consumed within the retort had sufficiently dispelled themselves to admit of it. Then a small opening, two inches in diameter, was made by pressing a small knob in the wall, and the incineration was to be seen. The cradle was plainly visible, and there lay the body enveloped as before, in its white sheet, to all appearances unscathed. One might have supposed it was the habitation of a human soul, so pure and heavenly was the appearance. The ghost of the gases seemed to have been dispelled, as no odor of any kind could be detected. That a dead body could be resolved into its natural elements so quickly and easily seemed strange, when one thought of the horrible processes going on daily in the burying grounds. Death had lost most of its terror. It seemed beautiful thus to pass away from materiality into vapor.

The process was nearly ended, but not entirely. The opening was closed, and the little party returned to town, to return after dark. Leaving, a view of the building was again had, and one could hardly suppose that so important an act had taken place in so modest a structure. No smoke stack, or anything indicating its use was visible. The single word Crematorium, hewn in a marble slab and placed above the iron door, told the story.

At 9 o'clock that night the party returned to the Crematorium, and a complete inspection of the building was made. Another view was had of the interior of the retort, and now all was passive light. No gaseous flames were visible. The light of the full moon could not have been milder or more beautiful. The cradle with its apparent burden was completely visible, and the body seemed to rest there, unharmed by the heat of the fire that had raged beneath the retort nearly twenty-four hours. A slight breeze would have destroyed this filmy shell of alum and muslin tissue. But none could reach it until the large iron door could be opened, which could not be done until morning. At 7 A. M. this was done, and a small heap of white ashes was visible. These were carefully removed by means of a wire brush from the bottom of the retort, and placed in a small 6 x 6-inch metal case. They were found to weigh four pounds and one ounce. Small fragments were found among the ashes, which were the remnants of the larger bones of the body, but no organic matter was there. The work was complete. By exposing the ashes to the air for a few hours, the whole assumed the appearance of white dust.

The third Crematorium was begun to be erected at Mount Olivet, Long Island, by the United States Cremation Company of New York, in November, 1884. It was to have been completed in August of the present year, at which time there were forty bodies, temporarily deposited in vaults, awaiting Cremation.

Before the building was under roof a severe storm did considerable damage, and apparently, some controversy arose between the Society and contractors, in consequence of which the completion of the structure seems to be deferred.

The most active Cremation Societies are those of Buffalo, Cincinnati, and New Orleans, from where we hope to hear next of the erection of Crematoria. Other societies have been organized in Kansas City, Davenport, Iowa, Baltimore, Philadelphia, Austin, and San Antonio, Texas. Two of the youngest are in California,

those of Los Angeles and Stockton. Evidently, the idea of Cremation has commended itself so much to the American mind, that its universal adoption in the near future cannot be doubted.

ENGLAND.

The "Cremation Society of England" was founded in January, 1874, by its members subscribing to the following declaration:

"We disapprove the present custom of burying the dead, and desire to substitute some mode which shall rapidly resolve the body into its component elements by a process which cannot offend the living, and shall render the remains innocuous. Until some better method is devised, we desire to adopt that usually known as cremation."

The Council immediately took steps to ascertain whether the performance of cremation was legally possible in this country.

The opinions of eminent counsel being such as to warrant the Council in concluding that the practice was perfectly legal, provided no nuisance was caused, the Council next obtained estimates as to the probable cost of land, buildings, and machinery, and of providing accommodation of an efficient kind. The estimates obtained ranged from £4,000 to £5,000, and a portion of this was subscribed, and a space chosen for the erection of the first crematorium on a site in the Great Northern Cemetery, with the consent of the proprietors. The Bishop of Rochester, however, wrote to the Council that he could not consent, and had no power to consent, to such a mode of disposing of the bodies of the dead, and for the time the matter remained in abeyance. Shortly after, the Council placed themselves in communication with the Government, and the correspondence which took place will be found in Sir Henry Thompson's work, and that of Sir T. Spencer Wells. Eventually the Council decided to erect a crematorium, and a freehold site was purchased at St. John's, near Woking, Surrey.

The original intention was to erect a crematorium upon the Siemens principle, but the one eventually chosen was that of the late Professor Gorini, of Lodi and Milan, and he assisted in its erection. Several cremations of the lower animals have been successfully carried out there by way of experiment, and one was

lately witnessed by the members of the Sewers Commission of London, and by some members of Parliament.

The crematorium built by the Council of the Society, near Woking, stands upon an acre of ground, is well planted, and is fenced round; but as yet no accommodation has been provided in the way of a hall or temple.

Towards the end of 1884 the Council of the Society, finding from the decision of Mr. Justice Stephen that the cremation of a body, if effected without nuisance, is perfectly legal, decided to open the crematorium.

In October, 1883, the first two modern cremations in England took place at Manston, Dorsetshire, and were described in the *Times* of October 11th, in that year, by Mr. W. Robinson, F. L. S., a member of the Executive Council of the Society. The crematorium was erected by Captain Hanham, upon his own property, and on his death his remains were also burnt in the same chamber. The apparatus which was erected for the purpose, after the designs of Mr. T. Richards, of Wiscanton, was somewhat of a temporary character, but it proved to work very well.

The crematorium belonging to the Cremation Society of England, erected by them at St. John's, Woking, Surrey, was made use of for the first time for the reduction of a human body on the 26th of March, 1885. The body upon which the rite was performed, was that of Mrs. Pickersgill, of London, aged 71, a lady well-known in literary and scientific circles; she had previously become a member of the Society, with a view of supporting the reform, in which she took great interest. The form of declaration drawn up by the Society had been signed by her, and after the medical certificates had been duly filled up by registered medical men, and an application from a representative of the deceased, the cremation was allowed to proceed. An autopsy had been previously carried out by the medical attendants of the deceased.

The body was conveyed to the crematorium from London in a suitable hearse, and the cremation, which lasted one hour, was attended by two friends of the deceased, who expressed themselves perfectly satisfied with the system employed. The cost for fuel was under 10s. altogether; and during the time of the cremation no smoke escaped from the chimney-shaft, while the ashes were of the purest white and small in volume.

ITALY.

As might be imagined, the greatest number of societies established for the promotion of cremation are to be found in Italy. This state of things is due to the foresight of the authorities who first permitted cremations to take place, and to the energetic services of Drs. Pini, Cristoforis, and others, who paved the way for a final triumph of the reform. The first society was instituted in Milan, 1876, chiefly owing to them, and the number of cremations which took place in that city alone from January 1st to December 31st, in 1884, were those of 41 males and 20 females, or 61 in all. The Societies of Lodi and Cremona were instituted in 1877, and in 1879 followed those of Udine and Rome. The year 1880 saw the birth of the Cremation Society of Varese and Padua, and in 1882 was founded that at Brescia. At all these places crematory buildings have been erected, and cremations are now performed. Besides the above societies in actual working order are those of Bologna, Modena, Venice, Florence, Turin, Parma, Verona, Pisa, Genoa, and fourteen others which have been duly constituted.

The cremation temple situated in the cemetery at Cremona was inaugurated in 1883 by the Municipal Council. The style is classical, and consists of two buildings, one being the mortuary chamber, and the other accommodating a Gorini crematory apparatus. The base of the chimney is surrounded by elegant statues.

The crematorium at Varese was erected in 1880, and although a small one, presents a handsome elevation. The chamber in which cremation is performed is placed in the center, just behind the room appropriated to the public, and which is approached through a roomy vestibule. A room has been provided where the relatives can be accommodated. At the sides of the temple are two columbaria for the reception of urns.

The cremation temple at Rome is situated at the Campo Varano Cemetery, and was commenced in 1882, the first cremation taking place in April, 1883, in presence of the Sanitary Council appointed by the Prefect. The building is somewhat of an Egyptian character, and surmounted by a pyramid which accommodates and conceals any chimney. The apparatus is of the Gorini pattern. An engraving of this bnilding, taken from a photograph forwarded by Sir T. Spencer Wells, Bart., was given in the *Graphic* of March 29th, 1884.

GERMANY.

The first Society for the propagation of Cremation in Germany originated at Dresden, and the first Congress was held there in 1876. The exertions made by the members of the society in this city eventually triumphed, however, and resulted in the establishment at Gotha, with the permission of the authorities, of a crematorium; to the building of which the friends of the reform subscribed about £1,100, and the city authorities about £3,700. The chief society and the center of agitation in Germany is situated at Berlin, and many meetings are held there, papers read and discussed, and the chief publication, *Die Flamme*, is issued from the Prussian capital. The Cremation Society of Hamburg was founded in 1876, and numbers nearly 500 members; its activity is almost equal to that in Berlin. There are other Societies now organized in almost all the large cities of Germany, as Magdeburg, Danzig, Koenigsberg, Breslau, Cassel, Darmstadt, Dresden, Wiesbaden, etc.

The crematorium erected at Gotha is of the most imposing kind. It is the pattern which won the prize offered by the Royal Institute of Lombardy, and is the invention of Mr. Frederick Siemens, of Dresden.

Operation of the Siemens Process.

The procedure of operation in the Siemens apparatus is as follows:—The fuel is put into the gas regenerator and lighted, and when the gas is formed in the lower portion of the heating compartment, it is mixed with atmospheric air. Suitable valves are provided to regulate the inflow of the two gaseous fluids. During the process of combustion, the flame imparts the major part of its heat to the fire-bricks constituting the chamber, and the products of combustion, which are sensibly cooled by passing through the cremation chamber first, the fire-clay grating next, are carried off through the flue, after previously going through the ash-box. After the apparatus has thus been in operation for some hours, the regenerator is brought to the requisite degree of heat, and becomes of a bright red color from top to bottom, whilst the cremation chamber shows a white heat; whereupon, the operation may be commenced.

The body being placed in a coffin or otherwise, is lowered by a

suitable mechanism into the crematory chamber, which is closed from above. After allowing the apparatus to go on working for a certain time, which in point of duration depends upon the bulk of the body to be cremated, the inlets of gas are shut off, while the atmospheric air is turned on, and this air rushing into the cremation chamber, after having first been heated in the regenerator by contact with the fire-bricks which compose it, is heated up to the temperature of the bricks themselves. This air then passes into the incinerating chamber, surrounds the body, and causes a rapid and thorough combustion. It being possible to carry out the operation with a large amount of superheated air, and the upcast of the flue being very powerful, no escape of effluvia is possible except by the chimney itself. When the apparatus has been brought to the proper degree of heat, at the initial stage before the body is introduced, the entire process of reducing the body can be carried out in from sixty to seventy-five minutes. A suitable inspection opening is made in the doors, enabling the official to regulate the operation. When this operation is over, the gas and air valves are reversed, whereupon the ashes, which fall into the ash-pit of the crematorium, can be collected and urned.

The Proportion of Females Cremated.

A remarkable, and psychologically interesting feature is observed here, in regard to the steadily and rapidly increasing female proportion of the number of persons cremated. From 1878 to 1882 that proportion was 25 per cent.; in 1883, 34.7 per cent.; in 1884, 46.4 per cent.; in 1885, as far as we have the record, 76.9 per cent., or more than three-fourths of the entire number.

FRANCE.

The Cremation Society of France holds its sittings in Paris, under the presidency of M. Koechlin-Schwartz, and its supporters already amount to a considerable number. The Prefect of Police has adopted the suggestion of the Paris Municipal Council, that the remains of bodies dissected in the hospitals, and which amount annually to nearly 4,000, shall be cremated, thus relieving the overcrowded cemeteries, and effecting considerable saving in the expenses of burial. The Prefecture of the Seine has decided that the apparatus for converting remains into ashes

shall be erected in the cemetery Pére la Chaise, but has not yet decided what system is to be adopted. M. Bartet, Chief Engineer of the city, who has visited the various foreign towns where cremation is practiced, recommends the use of the Gorini apparatus used at Milan. Branch Societies exist in Lyon, Marsaille and Namur.

OTHER COUNTRIES.

In Russia, Turkey, Roumania and Greece, the movement for cremation has not begun yet. But in all other European States, Cremation Societies, which are constantly growing in strength, maintain an activity that promises well for the future.

The example set by Italy has not been lost in South America, and in the Argentine Republic, in Uruguay, and in Mexico, a steady movement is on foot in its favor. In Mexico, authorization has already been granted to construct a crematorium on the Gorini pattern. In Rio de Janeiro a space of ground has been allotted, in the new cemetery there, upon which to erect a cremation temple. The Republic of Venezuela has also arranged to erect a crematorium, wherein to reduce to innocuous ashes the bodies of those who have fallen victims to yellow fever.

A society for the promotion of Cremation exists at Valparaiso, and is in communication with the Government to replace burial in the earth by cremation. The society already numbers 200 members.

In Hindostan, as is well known, cremation is practiced by millions of people, and, were it otherwise, the whole world would suffer, far more than it does, from epidemics born in this region. The arrangements there are the simplest form of pyre, and the only difference of cost lies in the class of wood employed. Many serious attempts have been made to introduce properly built crematoria, first of all, by Mr. Martin, in the year 1864, and by other persons since then; but the native mind appears to be averse to all mechanical innovation, and adheres to the primitive custom of their forefathers. The time must come, however, when the advantages of a properly constructed crematory will manifest themselves to the people, especially if one were set up by the Government, where wood fuel alone would be sufficient to ensure a perfect cremation, as is the case with the Gorini or Siemens apparatus.

In Japan, the practice of cremation was common from the earliest times, but the first recorded instance appears to be that of the renowned priest Dosho, in the year 700 A. D., whose body was burned by his disciples in accordance with his express wishes. The practice speedily spread even amongst the highest classes. A recent traveller in Japan, Mr. C. H. Wallroth, a Life Member of the Cremation Society of England, states that whilst at Kisto, he visited a crematorium situated in the near environs of the city, and that a portion of the building is reserved for funeral ceremony previous to the consignment of the body to any of the crematoria. Wooden faggots are used, and when cremation has resulted, the ashes are handed over to the relatives.

A GHASTLY POSSIBILITY.

Some of our Indians dispose of their dead by exposing them in open field, that they may be devoured by the beasts of the field and vultures of the air. This might at first thought appear cruel, heartless, barbarous, as no doubt it is ; but we hold, not more so than is the custom of burial. For if it is not cruel, heartless, and barbarous to feed the worms underground with our bodies, why should it be so if the beasts of the field are given a chance. From what has been seen and experienced, we would a thousand times rather prefer the open field, if we had the choice between the two.

As incidental to this mode of exposure, it may be remarked that the corpse not unfrequently follows his followers home again. Suspended animation resembles death to such an extent that even experienced physicians are often deceived. Much more so these poor savages, who, possibly actuated from such fear, adopted this peculiar mode of disposing of their dead.

A communication sent by the Secretary, Mr. Levy, to the Sacramento *Record-Union*, and published in that paper last February, tends to demonstrate what must not be looked upon as an impossibility. We extract therefrom the following :

"Much has been said by the press, and much more by medical journals, to condemn the present mode of disposal of our dead ; but thunder tones speak the harrowing news that a young lady of West Virginia had been buried alive. In the press dispatches of the 13th inst. was an account of the burial of a young woman, (Mary Cox) near Springfield, West Virginia. She was given two doses of morphia for neuralgia of the stomach ; soon after her death was announced, and two days later she was buried. A lady friend at the funeral insisted that the girl was not dead, and urged that a physician be sent for. That night the dogs of a man living near the graveyard stationed themselves near the tomb and kept up a persistent howling. Next day the grave was opened, and to the horror of all it was found that the girl had been buried

alive. The lining was torn from the sides of the coffin and the pillow was in shreds. The poor girl had literally stripped the clothes from her body. Her arms and hands were torn and bleeding, her lips bitten through, and handfuls of hair were torn from her head. The girl had come to life, and evidently made a fearful struggle to escape. 'The awful affair fills the community with horror,' says the dispatch.

"If this is the possibility to which we subject our dearly beloved ones, may God have mercy on those who do not strain every nerve in their body, who do not tax their brains to their utmost capacity, to accomplish reform. If anyone supposed that burying alive happened at very great intervals only, let him examine the press dispatches of the last six weeks, where there are no less than three such cases reported from three different States. Let us, however, suppose for a moment that only one such case happened out of a million interments. The reader of this may furnish the next one out of that million, for the chances are for all alike, who are supposed to have died a natural death. But let us reflect a little more upon the scarcity of such cases. If we consider that in the above-mentioned three cases, the discovery that the persons were buried alive was made by mere accident—as, for instance, in the case of Miss Cox, where the dogs, by their superior sense of hearing, recognized the cries of the victim in the grave—it fortifies the conviction that if all the graves of a cemetery could be opened and examined, dozens of victims would be found, whose position and surroundings bear indisputable evidence of their having been buried alive. 'But,' it is often said, 'Is it not possible also that a person might be *cremated* alive?' The answer is: At a properly conducted crematorium, *no;* for the following reasons: One of the appurtenances of such a crematorium consists of a room in which a high degree of temperature is maintained. In this room the body is placed upon an apparatus that would ring an alarm at the very slightest motion of the body, and attract the attention of the watchman. The high degree of temperature serves the double purpose of tending to bring the body to life, if it is a case of suspended animation, or, if of real death, to bring about a speedy decomposition. The body remains there until unmistakable signs of decomposition make their appearance, for that is the most absolute proof of death. But if there were no such safeguard connected with a crematorium, then

we would have the choice between two evils: either of being cremated, without a chance of suffering any agony whatever, or of being buried, and then living a few hours more in the grave, only to die there the most horrible of deaths known to man. Take your choice.

"I am aware that a great many people turn with a shudder from such reading. But to ignore, is not to apply a remedy. The press, the pioneer of progress and light, ought to take this subject up with more energy than has been exhibited so far, with few exceptions; otherwise the people will be too slow to comprehend the enormity of the outrage committed against the dead and the living by burial.[1] We do not recognize ignorance upon a subject of such vast importance. * * * The results of scientific investigations make it plain that whenever a dead human body is placed underground, or in a vault, a crime is committed, not only against the present, but also against future generations. To them the present graveyards will be pestilence-breeding spots, inherited as a curse from their forefathers; for cremation will as surely be the mode of disposal of their dead, as that the earth is moving and intelligence broadening. The very monuments over the graves will then tell of the criminal blindness and prejudice of our time.

Until that age is reached, it would be well for parents to keep at least their living children away from the graveyard. It is proved by science to be a dangerous place for them as a recreation ground, or even for casual visitation. The foul air and disease germs that penetrate the entire soil cannot easily be noticed, but they are there, nevertheless, and eager to attack their little victims, and sow the seeds of diphtheria or typhoid fever. This is beyond dispute."

Subsequently, the writer of the above had his attention called to two publications bearing upon the same subject: Dr. Trusen, Surgeon-General of the Prussian Army: "Denkschrift zur Leichen-Verbrennung." (Namslau, 1858, J. Hoffmann.)

Fr. Kempner: "Denkschrift ueber die Nothwendigkeit einer gesetzlichen Einfuehrung von Leichenhäusern." (6th edition, Breslau, 1867, Korn.)

[1] Since publication the gratifying observation has been made, that an increased interest is taken in our cause by the press and the public. It is to be hoped that a practical result may be obtained.

From the following statistic notes, taken therefrom, it will be seen that the occurrence of asphyxia has been immensely underrated.

In the city of Amsterdam, during a period of 25 years, 930 cases of Asphyxia had been discovered. In the city of Hamburg, during a period of 5 years, 107 cases. The Humane Society of London, during a period of 22 years, resuscitated 2,175 persons from Asphyxia. Bruhier mentions 181 cases as follows: 52 persons actually buried alive, 4 came to life again under the dissecting knife, 53 in the coffin, and 72 under various other circumstances.

Fourteen instances are mentioned in Kempner's publication, where the statements of those having been saved correspond with each other to the effect that while in a state of suspended animation, they were fully conscious of what was going on about them, but absolutely powerless to give the least sign of life.

The members of the Society for Popular Hygiene, of Wiesbaden, are pledged to each other to employ extraordinary precautionary measures for the purpose of avoiding the dreadful possibility of being buried alive. They constitute a branch of the Cremation Society of the same place, where, as yet, no Crematorium has been erected.

The modern Crematorium is a great triumph of science. Its beneficence extends even beyond the sanitary improvement of the community, and beyond esthetic and economic considerations. The sting of death itself is subdued in its painful operation, if once we know there is at last a decent, cleanly, safe, and dignified substitute for that which thinking people hold so much in abhorrence. It was only the expression of the opinion of multitudes, when a gentleman of this city, two years ago, regretting upon his deathbed the absence of a Crematorium, exclaimed: "*Death has no horrors but the grave!*"

DISPOSAL OF THE DEAD.

From an article published in the *Contemporary Review* and copied in the *Popular Science Monthly;* by Sir Henry Thompson, professor of clinical surgery in University College, London, we make the following extracts.

After Death! The last faint breath had been noted, and another watched for so long, but in vain. The body lies there, pale and motionless, except only that the jaw sinks slowly but perceptibly. The pallor visibly increases, becomes more leaden in hue, and the profound, tranquil sleep of Death reigns where just now were life and movement. Here, then, begins the eternal rest.

Rest! no, not for an instant. Never was there greater activity than at this moment exists in that still corpse. Activity, but of a different kind to that which was before. Already a thousand changes have commenced. Forces innumerable have attacked the dead. The rapidity of the vulture, with its keen scent for animal decay, is nothing to that of Nature's ceaseless agents now at full work before us. That marvelously complex machine, but this moment the theatre of phenomena too subtile and too recondite to be comprehended; denotable only by phraseology, which stands for the unknown and incomputable—vital, because more than physical, more than chemical—is now consigned to the action of physical and chemical agencies alone. And these all operating in a direction the reverse of that which they held before death. A synthesis, then, developing the animal being. The stages of that synthesis, now, retraced, with another end, still formative, in view. Stages of decomposition, of decay, with its attended putrescence ;process abhorrent to the living, who therefore desire its removal. "Bury the dead out of my sight," is the wholly natural sentiment of the survivor.

The process of decomposition affecting an animal body is one that has a disagreeable, injurious, often fatal influence on the living man, if sufficiently exposed to it. Thousands of human lives

have been cut short by the poison of slowly-decaying and often diseased animal matter. Even the putrefaction of some of the most insignificant animals has sufficed to destroy the noblest. To give an illustration which comes nearly home to some of us—the graveyard pollution of air and water alone has probably found a victim in some social circle known to more than one who may chance to read this paper. And I need hardly add, that in times of pestilence its continuance has been often due mainly to the poisonous influence of the buried victims.

Man, then, throughout all historic periods, has got rid of his dead kin after some fashion. He has either hidden the body in a cave, and closed the opening to protect its tenant from wild beasts, for the instinct of affection follows most naturally even the sadly-changed remains of our dearest relative; or, the same instinct has led him to embalm and preserve as much as may be so preservable —a delay, only, of Nature's certain work; or the body is buried beneath the earth's surface, in soil, in wood, in stone, or metal—each mode another contrivance to delay, but never to prevent, the inevitable change. Or, the body is burned, and so restored at once to its original elements, in which case Nature's work is hastened, her design anticipated, that is all. And, after burning, the ashes may be wholly or in part preserved in some receptacle, in obedience to the instinct of the survivor, referred to above. All forms of sepulture come more or less under one of these heads.[1]

One of the many social questions waiting to be solved, and which must be solved at no very remote period, is: Which of these various forms of treatment of the dead is the best for survivors?

This question may be regarded from two points of view, both possessing importance, not equally perhaps; but neither can be ignored.

a. From the point of view of Utility; as to what is best for the entire community.

b. From the point of view of Sentiment; the sentiment of affectionate memory for the deceased which is cherished by the survivor.

I assume that there is no point of view to be regarded as be-

[1] "Burial at sea" is a form of exposure, the body being rapidly devoured by marine animals.

longing to the deceased person, and that no one believes that the dead has any interest in the matter. We who live may anxiously hope—as I should hope, at least—to do no evil to survivors after death, whatever we may have done of harm to others during life. But, being deceased, I take it we can have no wishes or feelings touching this subject. What is best to be done with the dead is, then, mainly a question for the living, and to them it is one of extreme importance. When the globe was thinly-peopled, and when there were no large bodies of men living in close neighborhood, the subject was an inconsiderable one and could afford to wait, and might indeed be left for its solution to sentiment of any kind. But the rapid increase of population forces it into notice, and especially man's tendency to live in crowded cities. There is no necessity to prove, as the fact is too patent, that our present mode of treating the dead, namely, that by burial beneath the soil, is full of danger to the living. Hence intramural interment has been recently forbidden, first step in a series of reforms which must follow. At present, we who dwell in towns are able to escape much evil by selecting a portion of ground distant—in this year of grace 1873—some five or ten miles from any very populous neighborhood, and by sending our dead to be buried there—laying by poison nevertheless, it is certain, for our children's children, who will find our remains polluting their water-sources, when that now distant plot is covered, as it will be more or less closely, by human dwellings. For it can be a question of time only, when every now waste spot will be utilized for food-production or for shelter, and when some other mode of disposing of the dead than that of burial must be adopted. If therefore, burial in the soil be certainly injurious either now or in the future, has not the time already come to discuss the possibility of replacing it by a better process? We cannot too soon cease to do evil and learn to do well. Is it not, indeed, a social sin of no small magnitude to sow the seeds of disease and death broadcast, caring only to be certain that they cannot do much harm to our own generation? It may be granted, to anticipate objection, that it is quite possible that the bodies now buried may have lost most, if not all, their power of doing mischief by the time that the particular soil that they inhabit is turned up again to the sun's rays, although this is by no means certain; but it is beyond dispute that the margin of safety as to time grows narrow-

er year by year, and that pollution of wells and streams which supply the living must ere long arise wherever we bury our dead in this country. Well, then, since every buried dead body enters sooner or later into the vegetable kingdom, why should we permit it, as it does in many cases, to cause an infinity of mischief during the long process?

Let us at this point glance at the economic view of the subject, for it is not so unimportant as, unconsidered, it may appear. For it is an economic subject, whether we will it or not. No doubt a sentiment repugnant to any such view must arise in many minds, a sentiment altogether to be held in respect and sympathy. Be it so; the question remains strictly a question of prime necessity in the economic system of a crowded country. Nature will have it so, whether we like it or not. She destines the material elements of my body to enter the vegetable world, on purpose to supply another animal organism which takes my place. She wants me, and I *must* go. There is no help for it. When shall I follow—with quick obedience, or unwillingly, truant-like, traitor-like, to her and her grand design? Her capital is intended to bear good interest, and to yield quick return; all her ways prove it—"increase and multiply" is her first and constant law. Shall her riches be hid in earth to corrupt, and bear no present fruit, or be utilized without loss of time, value, and interest, for the benefit of starving survivors? Nature hides no talent in a napkin; we, her unprofitable servants only, thwart her ways and delay the consummation of her will.

What, then, is it proposed to substitute for this custom of burial? The answer is easy and simple. Do that which is done in all good work of every kind—follow Nature's indication, and do the work she does, but do it better and more rapidly. For example, in the human body she sometimes throws off a diseased portion in order to save life, by slow and clumsy efforts, it is true, and productive of much suffering; the surgeon performs the same task more rapidly and better, follows her lead, and improves on it. Nature's many agents, laden with power the overaction of which is harmful, we cannot stop; but we tame, guide, and make them our most profitable servants. So here, also, let us follow her. The naturally slow and disagreeable process of decomposition, which we have made by one mode of treatment infinitely more slow and not less repulsive, we can, by another mode of treatment,

greatly shorten, and accomplish ; without offense to the living. What in this particular matter is naturally the work of weeks or months, can be perfectly done in an hour or two.

The problem to be worked is: Given a dead body, to resolve it into carbonic acid, water, and ammonia, and the mineral elements, rapidly, safely, and not unpleasantly.

The answer may be practically supplied in a properly-constructed furnace. The gases can be driven off without offensive odor—the mineral constituents will remain in a crucible. The gases will, ere night, be consumed by plants and trees. The ashes, or any portion of them, may be preserved in a funeral-urn, or may be scattered on the fields, which latter is their righteous destination. No scents or balsams are needed, as on Greek and Roman piles, to overcome the noxious effluvia of a corpse burned in open air. Modern science is equal to the task of thus removing the dead of a great city, without instituting any form of nuisance ; none such as those we tolerate everywhere from many factories, both to air and streams. Plans for the accomplishment of this have been considered; but discussion of the subject alone is aimed at here. To treat our dead after this fashion would return millions of capital without delay to the bosom of mother Earth, who would give us back large returns at compound interest for the deposit.

And what has sentiment to urge on behalf of the present process? Let us see what the process is.

So far as I dare! for, could I paint, in its true colors, the ghastly picture of that which happens to the mortal remains of the dearest we have lost, the page would be too deeply stained for publication. I forbear, therefore, to trace the steps of the process which begins so soon and so painfully to manifest itself after that brief hour has passed, when " she lay beautiful in death." Such loveliness as that, I agree, it might be treason to destroy, could its existence be perpetuated ; and did not Nature so ruthlessly and so rapidly blight her own handiwork, in furtherance of her own grand purpose. The sentiment of the survivor, on behalf of preserving the beauty of form and expression, were it possible to do so, would, I confess, go far to neutralize the argument based on utility, powerful as it is. But a glimpse of the reality, which we achieve by burial, would annihilate, in an instant, every sentiment for continuing that process. Nay, more, it would

arouse a powerful repugnance to the horrible notion that we, too, must some day become so vile and offensive, and, it may be, so dangerous; a repugnance surmountable only through the firm belief that after death the condition of the body is a matter of utter indifference to its dead life-tenant. Surely, if we, the living, are to have sentiments, or to exercise any choice about the condition of our bodies after death, those sentiments and that choice must be in favor of a physical condition, which cannot be thought of either as repulsive in itself, or as injurious to others.

There is a source of very painful dread, as I have reason to know, little talked of, it is true, but keenly felt by many persons, at some time or another, the horror of which, to some, is inexpressible. It is the dread of premature burial; the fear lest some deep trance should be mistaken for death, and that the awakening should take place too late. Happily, such occurrences must be exceedingly rare, especially in this country, where the interval between death and burial is considerable; and the fear is almost a groundless one. Still, the conviction that such a fate is possible, which cannot be altogether denied, will always be a source of severe trial to some. With cremation, no such catastrophe could ever occur; and the completeness of a properly conducted process would render death instantaneous and painless, if by an unhappy chance any individual so circumstanced were submitted to it. But the guarantee against this danger would be doubled, since inspection of the entire body must of necessity immediately precede the act of cremation, no such inspection being possible under the present system.

In order to meet a possible objection to the substitution of cremation for burial, let me observe that the former is equally susceptible with the latter of association with religious funereal rites, if not more so. Never could the solemn and touching words, "ashes to ashes, dust to dust," be more appropriately uttered, than over a body about to be consigned to the furnace; while, with a view to metaphor, the dissipation of almost the whole body in the atmosphere, in the ethereal form of gaseous matter, is far more suggestive as a type of another and a brighter life, than the consignment of the body to the abhorred prison of the tomb.

By a series of chemical processes, it has been attempted to preserve in the corpse the appearance natural to life, as regards color and form. Admirable as the result appears to be, in preserving

anatomical and pathological specimens of the body, it is, in my opinion, very far from successful when applied to the face and hand. At best, a condition is produced which resembles a badly-colored and not well-formed waxen image. And the consciousness that this imperfect achievement is the real person, and not a likeness, so far from being calculated to enhance its value to the survivor, produces the very painful impression, as it were, of a debased original; while, moreover, it is impossible not to be aware that the substitution of such an image for the reality must, in time, replace the mental picture which exists of the once living face lighted by emotion and intelligence, of which the preserved face is wholly destitute.

To return to the process of cremation. There are still numerous considerations in its favor which might be adduced, of which I shall mention only one, namely: the opportunity it offers of escape from the ghastly but costly ceremonial which mostly awaits our remains after death. How often have the slender shares of the widow and orphan been diminished in order to testify, and so unnecessarily, their loving memory of the deceased, by display of plumes and silken scarfs about the unconscious clay! And, again, how prolific of mischief to the living is the attendance at the burial-ground, with uncovered head and damp-struck feet, in pitiless weather, at that chilling rite of sepulture! Not a few deaths have been clearly traceable to the act of offering that "last tribute of respect."

We repeat, that subscribers to the Capital Stock of the San Francisco Cremation Company *are not obliged* to adhere to or accept the principle of cremation. In fact, they are under no other obligation than is embodied in the following agreement:

TO THE DIRECTORS

—OF—

The San Francisco Cremation Company.

I.....

of.....

hereby agree to take.....*shares of the capital stock of the above company, and I enclose herewith the sum of*

.....*dollars, being twenty per cent. of the par value of such shares, required by law to be paid at the time of subscribing. I further agree to pay the balance of the value of such shares taken by me, in such installments, and at such times, as the directors of the company may demand.*

Signed, ...

Address, ...

Date.....

[Intending subscribers may make use of this blank, cut it out, and send it to the proper address.]

Subscriptions are received at the office of General H. A. Cobb, 321 Montgomery St., and at the office of the Secretary.

Those preferring to pay the full amount of their subscription in one payment, are at liberty to do so.

Authorized to receive donations, are: The President, Secretary and the members of the Board of Directors.